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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/008,388

12/07/2001

Janice A. Kehrli

G04.008

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67338

7590

06/30/2009

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EXAMINER

SHEER, CRISTINA O

ART UNIT

PAPER NUMBER

3685

MAIL DATE

DELIVERY MODE

06/30/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/008,388

**Applicant(s)**

KEHRLI ET AL.

**Examiner**

CRISTINA SHERR

**Art Unit**

3685

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on April 6, 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7, 9-18 and 20-23 is/are pending in the application.
- 4a) Of the above claim(s) 2-6, 21 and 22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 7, 9-18, 20 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This Office Action is in response to Applicant's Amendment filed April 6, 2009. Claims 1-7, 9-18, and 20-23 are currently pending in this case. Claims 1, 20, and 23 are currently amended. Claims 8, 19, 24, and 25 were previously canceled. Claims 2, 3, 4, 5, 6, 21, and 22 were withdrawn pursuant to an earlier Requirement for Election/Restriction. Accordingly, claims 1, 7, 9-18, 20, and 23 are currently under examination.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 6, 2009 has been entered.

#### ***Response to Arguments***

3. Applicant's arguments filed April 6, 2009 have been fully considered but they are not persuasive.

4. Applicant argues, regarding claim 1, 20 and 23, as currently amended, that nothing in the cited prior art discloses, teaches, or suggests, "determining information associated with an additional mortgage loan to be added to the portfolio in accordance with a contribution of the additional mortgage loan to the portfolio, including at least one desired profitability value for the additional mortgage loan", "calculating the loan spread

associated with the additional mortgage loan in accordance with a contribution of the additional mortgage loan to the portfolio”, and “calculating a combined profitability of the portfolio and the additional mortgage loan based on combined category sizes for the plurality of mortgage loans of the portfolio and the additional mortgage loan.”

5. Regarding claim 20, we note that while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function alone. MPEP 2114; *In re Swineheart*, 169 USPQ 226; *In re Schreiber*, 44 USPQ2d 1429 (Fed. Cir. 1997). In this case, we find that the apparatus of claim 20 is comprised if a processor and storage device. The various determinations and calculations performed refer to what the apparatus rather than what it is, and thus would not serve to distinguish the claim from the prior art.

6. Regarding claims 1 and 23, Examiner respectfully disagrees and directs attention to Freeman, at col 13 ln 60-65, where Freeman discloses adding the category size for the additional mortgage loan to the current category size., col 12 ln 59-col 13 ln 4 where Freeman discloses calculating the loan spread associated with the additional mortgage loan in accordance with a contribution of the additional mortgage loan to the portfolio, and calculating the combined profitability of the portfolio and the additional mortgage loan (Freeman at col 13 ln 60-67). Freeman does not specifically disclose calculating a combined profitability of the portfolio and the additional mortgage loan based on combined category sizes for the plurality of mortgage loans of the portfolio and the additional mortgage loan.” However, it would be a predictable result to calculate

combined profitability based on any available germane information, including based on combined category sizes for the plurality of mortgage loans of the portfolio and the additional mortgage loan. *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007).

***Official Notice***

7. With regard to claims 1, 20 and 23, the following assertions of fact have gone unchallenged and are now considered prior art:

- Transmitting a value to a user terminal via network

***Claim Objections***

8. Claim 1 is objected to because of the following informalities:
9. The claim is designated "previously presented", and yet appears to be currently amended. Appropriate correction is required.

***Remarks***

**10.** Claims 1, 20, and 23, recite, in newly added language "... that expresses the size of each category rating ... "Note that such language constitutes descriptive material (e.g. music, literature, art, photographs and mere arrangements or compilations of facts or data) that cannot exhibit any functional interrelationship with the way in which computing processes are performed, does not further limit the claims, and thus does not serve to further distinguish the claims from the prior art. *In re Ngai*, 70 USPQ2d (Fed. Cir. 2004), *In re Lowry*, 32 USPQ2d 1031 (Fed. Cir. 1994); MPEP 2106.01.

***Claim Rejections - 35 USC § 101***

11. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

12. Claims 1-7, 9-18 and 23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

13. Based on Supreme Court precedent (See also *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876)) and recent Federal Circuit decisions, a §101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. In addition, the tie to a particular apparatus, for example, cannot be mere extra-solution activity. See *In re Bilski*, 88 USPQ2d 1385 (Fed. Cir. 2008).

14. An example of a method claim that would not qualify as a statutory process would be a claim that recited purely mental steps.

15. To meet prong (1), the method step should positively recite the other statutory class (the thing or product) to which it is tied. This may be accomplished by having the claim positively recite the machine that accomplishes the method steps. Alternatively or to meet prong (2), the method step should positively recite identifying the material that is being changed to a different state or positively recite the subject matter that is being transformed.

16. In this particular case, claim 1 fails prong (1) because the "tie" (e.g. a user terminal ) is representative of extra-solution activity. Additionally, the claim(s) fail prong

(2) because the method steps do not transform the underlying subject matter to a different state or thing.

17. Claims 2-7 and 9-18 are also rejected as each depends from claim 1.

18. Regarding claim 23, under the broadest reasonable interpretation standard, claim 23 recites a computer program only. "Computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical 'things.' They are neither computer components nor statutory processes, as they are not 'acts' being performed." MPEP §2106.01 I. Because the claims recite only abstractions that are neither "things" nor "acts," the claims are not within one of the four statutory classes of invention.<sup>1</sup> Because the claims are not within one of the four statutory classes of invention, the claims are rejected under 35 U.S.C. §101.

19. In this case, the instructions never actually cause the computer to perform the steps.

#### ***Claim Rejections - 35 USC § 103***

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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<sup>1</sup> 35 U.S.C. §101 defines four categories of inventions that Congress deemed to be the appropriate subject matter of a patent; namely, processes, machines, manufactures and compositions of matter. The latter three categories define "things" (or products) while the first category defines "actions" (i.e., inventions that consist of a series of steps or acts to be performed).

21. Claims 1, 7, 9-18, 20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman et al (US 6,249,775).

22. Regarding claim 1 –

23. Freeman discloses a method to facilitate analysis of a commercial mortgage backed security portfolio (e.g. col 1 ln 5-10), comprising:

determining base information for a commercial mortgage backed security portfolio including a plurality of mortgage loans, the portfolio being associated with a plurality of credit rating categories and each of the plurality of credit rating categories of the portfolio is associated with a corresponding category size that expresses the size of each credit rating category as a percentage of the total portfolio; (e.g. col 3 ln 10-21)

determining information associated with an additional mortgage loan to be added to the portfolio, including at least one desired profitability value for the additional mortgage loan, the additional mortgage loan being associated with a plurality of credit rating categories and each of the plurality of credit rating categories is associated with a corresponding category size that expresses the size of each credit rating category as a percentage of the additional mortgage loan; (e.g. col 15 ln 35-43)

calculating a loan spread associated with the additional mortgage loan in accordance with a contribution of the additional mortgage loan to the portfolio; (e.g. col 12, ln 32-45; note also that, as above, Freeman, at, e.g., col 15 ln 65 – col 16 ln 14, discloses where different types of loans are described as being separately graphed, i.e., "nor should one place too much emphasis on the absolute height of each bar, since this may reflect different expectations among the various groups or types of loans that



are being analyzed". In other words, each loan has its bar and the height of different bars on the graph is attributed in part to the difference in the type of loan. col 15 ln 65 – col 16 ln 14. Because Freeman is looking at or considering different types of loans or obligations separately, and thus giving them different weights or emphasis, it would be a predictable that one variation of this would be to give mortgage loans all the "weight" or emphasis and no weight at all to other loans in predicting future profitability. *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007).

calculating a combined profitability of the portfolio and the additional mortgage loan; (e.g. col 13 ln 50-65, col 14 ln 15-25).

24. Freeman does not specifically disclose calculating a combined profitability of the portfolio and the additional mortgage loan based on combined category sizes for the plurality of mortgage loans of the portfolio and the additional mortgage loan. However, Freeman does recite "a mortgage originator can perform portfolio analysis and ascertain which product type, program, type of underwriting, property type, type of customer, origination channel, etc. is at risk, without waiting for the mortgages to actually mature and enter default. The only constraint is the amount of data attributes that the mortgage loan originator keeps on any customer over time, which for the purposes of the present invention may be two years. The mortgage originator can then dynamically adjust the flow of origination by altering any credit criteria derived from a particular attribute." (col 13 ln 50-60) Thus, it would be a predictable result to calculate combined profitability based on any available germane information, including based on combined category

sizes for the plurality of mortgage loans of the portfolio and the additional mortgage loan. *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385 (U.S. 2007).

25. Freeman does not disclose transmitting the above information to a user terminal via network. However, official notice is taken that such transmission is old and well known since the Internet and other such networks have come into widespread use.

26. Regarding claim 7 –

27. Freeman discloses calculating the loan spread associated with the additional mortgage loan in accordance with a contribution of the additional mortgage loan to the portfolio. (e.g. col 12 ln 59- col 13 ln 4).

28. Regarding claim 9 –

29. Freeman discloses wherein the determination of category sizes for the additional mortgage loan is based on at least one of: a property type, a risk value, debt service coverage ratio information, and loan to value information. (e.g. col 13 ln 11-25).

30. Regarding claim 10

31. Freeman discloses adding the category size for the additional mortgage loan to the current category size to determine a combined category size for each credit rating category. (e.g. col 13 ln 60-65)

32. Regarding claim 11 –

33. Freeman discloses determining an original profitability of the portfolio; calculating a combined profitability of the portfolio and the additional mortgage loan based on the combined category sizes; and subtracting the original profitability from the combined

profitability to determine a profitability of the additional mortgage loan. (e.g. col 13 In 60-67).

34. Regarding claim 12 –

35. Freeman discloses wherein calculation of the loan spread is an iterative process. (e.g. col 16 In 36-45).

36. Regarding claim 13 –

37. Freeman discloses wherein the iterative process includes: determining a trial loan spread for the additional mortgage loan; computing a resulting profitability based on the trial spread; and adjusting the trial loan spread, wherein said computing and adjusting are repeated until the resulting profitability is within a predetermined range of the desired profitability. (e.g. col 13 In 49=59, col 12 In 59- col 13 In 4).

38. Regarding claim 14 –

39. Freeman discloses wherein said adjusting is based on duration of the additional mortgage loan. (e.g. col 4 In 61 – col 5 In 5).

40. Regarding claim 15 –

41. Freeman discloses wherein said adjusting comprises: determining an original duration of the portfolio; calculating a combined duration of the portfolio and the additional mortgage loan; and subtracting the original duration from the combined duration to determine the duration of the additional mortgage loan. (e.g. col 4 In 61 – col 5 In 5).

42. Regarding claim 16 –

43. Freeman discloses wherein the method is performed for a plurality of desired profitability values to determine a plurality of loan spread values. (e.g. col 15 ln 20-30).
44. Regarding claim 17 –
45. Freeman discloses wherein said calculating is performed via a substantially real-time pricing application. (fig. 5).
46. Regarding claim 18 –
47. Freeman discloses wherein said calculating is further performed utilizing a function library adapted to generate loan and/or commercial mortgage backed securities cash flows. (e.g. col 16 ln 55-65).
48. Regarding claims 20 and 23 –
49. Claims 20 and 23 are rejected under the same criteria as claim 1, above.

#### ***Conclusion***

50. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CRISTINA SHERR whose telephone number is (571)272-6711. The examiner can normally be reached on 8:30-5:00 Monday through Friday.
51. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Calvin L. Hewitt, II can be reached on (571)272-6709. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

52. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CRISTINA OWEN SHERR  
Examiner  
Art Unit 3685

/Calvin L Hewitt II/  
Supervisory Patent Examiner, Art Unit 3685